

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Masayuki Nishiguchi et al.

Serial No.:

Filed :

For : AUDIO REPRODUCING APPARATUS

Group A.U.: 2644

April 26, 2001
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PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to the initial examination of the above-identified application, which is a division of Application Serial No. 08/747,910 filed November 12, 1996, which is a division of Application Serial No. 07/600,818 filed October 20, 1990, now US Patent 5,640,548, Applicants respectfully request that the application be amended as follows.

IN THE CLAIMS

Please amend claim 1 by rewriting same to read as follows, cancel claims 2 and 3, without prejudice or disclaimer, and add new claims 4-15 set forth below.

--1. (Amended) a portable audio signal recording and reproducing apparatus comprising:

an encoder for generating compressed data using a high-efficiency compression method;

a memory unit including at least one semiconductor memory for storing the compressed audio data from said encoder;

a decoder for decoding the compressed data read out from the memory unit and producing a decoded output signal according to a reverse processing of the high-efficiency compression method;

a digital/analog converter for converting the decoded output signal from said decoder into an analog signal;

a headphone unit receiving said analog signal from digital/analog converter and for producing acoustic sounds from there; and

an input unit including a plurality of user-operated keys, wherein one of the compressed audio data is read out from said memory unit in response to operation of one of said keys of said input unit.

--4. (New) The portable audio signal recording and reproducing apparatus according to claim 1, wherein said apparatus further comprises an analog/digital converter for converting an analog audio signal into a digital audio signal and the digital audio signal outputted from said analog to digital converter is supplied to said encoder.

--5. (New) The portable audio signal recording and reproducing apparatus according to claim 1, further comprising a housing unit for housing therein said memory unit, said decoder, and said digital/analog convertor and having said input unit arranged thereon.

--6. (New) The portable audio signal recording and reproducing apparatus according to claim 5, further comprising mounting means, whereby said memory unit is removably housed in said housing unit.

--7. (New) The portable audio signal recording and reproducing apparatus according to claim 5, further comprising electrical connecting means for electrically connecting said headphone unit and said housing unit.

--8. (New) The portable audio signal recording and reproducing apparatus according to claim 1, further comprising mounting means, whereby said memory unit is removable.

--9. (New) A portable audio signal reproducing apparatus, comprising:

a memory unit for storing a plurality of music data portions and including at least one semiconductor memory having stored therein high-efficiency compression encoded audio data

making up said plurality of music data portions, said semiconductor memory having a capacity for storing a predetermined amount of said audio data resulting in at least fifteen minutes of an analog signal;

a reproducing circuit having

a decoder for decoding said audio data read out from said memory unit and producing a decoded output signal, and

a digital/analog converter for converting the decoded output signal from said decoder into said analog signal;

a plurality of headphone units receiving said analog signal from said digital/analog converter and for producing acoustic sounds therefrom; and

a headband having said headphone units arranged at both ends thereof and housing said reproducing circuit.

--10. (New) The portable audio signal reproducing apparatus according to claim 9, further comprising an input unit including a plurality of user-operated keys, wherein one of said music data portions is read out from said memory unit in response to operation of one of said keys of said input unit.

--11. (New) The audio signal reproducing apparatus according to claim 10, further comprising a housing unit for

housing therein said memory unit, said decoder, and said digital/analog convertor and having said input unit arranged thereon.

--12. (New) The audio signal reproducing apparatus according to claim 11, further comprising holding means, whereby said memory unit is removably housed in said housing unit.

--13. (New) The audio signal reproducing apparatus according to claim 11, further comprising electrical connecting means for electrically connecting said headphone unit and said housing unit.

--14. (New) The audio signal reproducing apparatus according to claim 9, further comprising mounting means, whereby said memory unit is removable.

--15. (New) The audio signal reproducing apparatus according to claim 9, wherein said apparatus further comprises a battery housed in said headband.---

REMARKS

Claim 1 remains in this application and has been amended hereby with claims 2 and 3 having been cancelled without prejudice

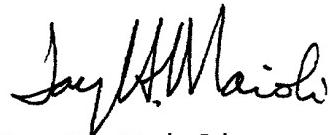
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or disclaimer and new claims 4-15 having been added.

This application is a division of Application Serial No. 08/747,910 filed November 12, 1996, which is a division of Application Serial No. 07/600,818 filed October 22, 1990, now US Patent 5,640,458.

An early and favorable examination on the merits is earnestly solicited.

Respectfully submitted,
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VERSION WITH MARKINGS TO SHOW CHANGES MADE
IN THE CLAIMS

Please amend claim 1 by rewriting same to read as follows , cancel claims 2 and 3, without prejudice or disclaimer, and add new claims 4-15 set forth below.

--1. (Amended) a [headphone type] portable audio signal recording and reproducing apparatus comprising:

an encoder for generating compressed data using a high-efficiency compression method;

a memory unit including at least one semiconductor memory for storing [digitized and high efficiency compression encoded] the compressed audio [signals] data from said encoder;

a decoder for [reading out data stored in said semiconductor] decoding the compressed data read out from the memory unit and [decoding the read-out data, by way of performing an operation which is an inversion] producing a decoded output signal according to a reverse processing of the high-efficiency compression [encoding,] method;

a digital/analog converter for converting the decoded output [signals] signal from said decoder into an analog [signals, and] signal;

a headphone unit [for converting output signals] receiving said analog signal from digital/analog converter [into] and for producing acoustic [signals.] sounds from there; and

an input unit including a plurality of user-operated keys, wherein one of the compressed audio data is read out from said memory unit in response to operation of one of said keys of said input unit.